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(21) International Application Number: PCT/US99/01818 (22) International Filing Date: 28 January 1999 (28.01.99) (30) Priority Data: 15626/98 28 January 1998 (28.01.98) JP (71) Applicant (for all designated States except US): MINNESOTA MINING AND MANUFACTURING COMPANY [US/US]; 3M Center, P.O. Box 33427, Saint Paul, MN 55133-3427 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): OUDERKIRK, Andrew, J. [US/US]; 2996 Leyland View, Woodbury, MN 55125 (US). HARADA, Takashi [JP/JP]; 5064-1, Naruse, Machida, Tokyo 194 (JP). ISHIKAWA, Makoto [JP/JP]; 3-14-3-606, Tsukimino, Yamato-city, Kanagawa pref. 242-0002 (JP). YODA, Akira [JP/JP]; 9-19, Ogawa 3-chome, Machida-city, Tokyo 194-0003 (JP). NAKAMURA, Tatsuya [JP/JP]; 1-1-32-706, Sagami-hara, Sagami-hara-city, Kanagawa pref. 229-0031 (JP).		(74) Agent: GWIN, H., Sanders, Jr.; Minnesota Mining and Manufacturing Company, Office of Intellectual Property Counsel, P.O. Box 33427, Saint Paul, MN 55133-3427 (US). (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report.	

(54) Title: INFRARED INTERFERENCE FILTER

(57) Abstract

An optical filter including a dielectric reflective layer capable of reflecting a predetermined proportion of light in a specific wavelength region while transmitting a predetermined proportion of light in the visible region. The dielectric reflective layer includes a first set of dielectric reflective layer units, constituted by a plurality of layers each formed of a first polymer, in combination with a second set of dielectric reflective layer units constituted by a plurality of layers each formed of a second polymer having a refractive index different from the first polymer, the first and second sets of dielectric reflective layer units being combined by alternately stacking the first polymer layers and second polymer layers, the dielectric reflective layer having a reflectance of not less than 70 % of the light to be reflected and a transmittance of not less than 60 % of light in the three primary color regions of the visible spectrum, including a blue region (wavelength; 430-490 nm), a green region (wavelength; 515-575 nm), and a red region (wavelength; 580-640 nm).

